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Release Hormone Analogue

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CARBOXYLIC ACID;

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Release Hormone Analogue

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Release Hormone Analogue

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Release Hormone Analogue

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Release Hormone Analogue

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Gly Arg

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: PCR DNA Primer

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ggaattctta cttattgtat ccttta

26

(19) World Intellectual Property Organization
International Bureau



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26 September 2002 (26.09.2002)

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(10) International Publication Number
WO 02/074327 A3

(51) International Patent Classification⁷: **A61K 38/16**, 38/22, 38/24, 38/48, C12N 9/52

(21) International Application Number: PCT/US02/07379

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(25) Filing Language: English

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(30) Priority Data:
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(72) Inventor; and

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(74) Agents: **DONOVAN, Stephen** et al.; c/o Allergan Sales, Inc., 2525 Dupont Drive, Irvine, CA 92612 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

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12 December 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 02/074327 A3

(54) Title: COMPOSITIONS AND METHODS FOR TREATING GONADOTROPHIN RELATED ILLNESSES

(57) Abstract: The present invention relates to an agent comprising a neurotoxin, methods for making the agents and methods for treating endocrine disorders, for example gonadotrophin related illnesses. Preferably, the agent comprises at least a portion of a botulinum toxin.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/07379

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 38/16, 38/22, 38/24, 38/48; C12N 9/52

US CL : 424/94.63, 530/399, 435/220, 514/2, 12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 424/94.63, 530/399, 435/220, 514/2, 12

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,707,964 A (NETT et al.) 13 January 1998 (13.01.98), entire document.	1-25
X	WO 90/09799 A1 (COLORADO STATE UNIVERSITY RESEARCH FOUNDATION) 07 September 1990 (07.09.1990), entire document	1-2, 9, 11-24
—		-----
Y		3-8, 10, 25
Y	US 5,939,070 A (JOHNSON et al.) 17 August 1999 (17.08.1999), entire document	3-8, 10, 25
Y	US 5,989,545 A (FOSTER et al.) 23 November 1999 (23.11.1999), entire document.	3-8, 10, 25

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

Date of the actual completion of the international search

26 July 2002 (26.07.2002)

Date of mailing of the international search report

28 AUG 2002

Name and mailing address of the ISA/US

Commissioner of Patents and Trademarks

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Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

PCT/US02/07379

Continuation of B. FIELDS SEARCHED Item 3:

Dialog files 155, ,5 35, 349 (MEDLINE, Biosis, Dissertation Abs., PCT full text); WEST files USPT, DWPI search terms: GNRH, gonadotrophin, releas?, hormone, receptor, bind? affinity, target?, toxin, neurotoxin?,